

REMARKS

In this Amendment, Applicant has added new claims 35 and 36. Claims 1-26 are now pending in the application.

In the Office Action, the Examiner rejected claims 1-34 under 35 U.S.C. 103(a) as being unpatentable over European Patent Application No. 0,321,672 A2 to Lynk (Lynk) in view of Great Britain Published Patent Application No. 2,336,975A to Stevens (Stevens).

Applicant respectfully traverses this rejection. Lynk and Stevens, whether taken alone or in combination, fail to disclose or suggest the inventions defined by Applicant's claims. Moreover, the applied references provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention.

Contrary to the requirements of claims 1-11, 20-25, and 33, for example, Lynk and Stevens fail to disclose or suggest transmission of a request for access to a broadcast link in a point-to-multipoint communication system, transmission of audio with the access request, and termination of the audio transmission in the event the access request is denied.

Lynk and Stevens also fail to disclose reception of a request for access to a broadcast link in a point-to-multipoint communication system, reception of audio with the access request, and transmission of the audio via the broadcast link in the event the access request is granted, as required by claims 12-19 and 34.

In addition, the Lynk and Stevens references neither disclose nor suggest an arbitration controller for a point-to-multipoint communication system comprising a processor that receives a request for access to a broadcast link from a wireless communication device in a point-to-multipoint communication system, wherein the wireless communication device transmits audio with the request for access, and the processor determines whether to grant the access request, and directs transmission of the audio via the broadcast link in the event the access request is granted, as set forth in claims 26-32.

In support of the rejection of claims 1, 12, 13, 20, 26, 27, 33 and 34, the Examiner characterized Lynk as disclosing transmission of a request for access to a broadcast link in a point-to-multipoint communication system, and transmission of audio with the access request. The Examiner acknowledged that Lynk does not teach terminating the audio transmission in the event the access request is denied.

The Examiner cited Stevens, however, as teaching the termination of an audio transmission when an access request is denied. On this basis, the Examiner concluded that it would have been obvious to modify the Lynk system in view of Stevens to terminate an audio transmission when an access request is denied "in order to transmit information only to the channels available in order to avoid connection delays."

Applicant respectfully submits that the Examiner has misinterpreted the Lynk reference. In particular, Lynk makes no mention of the transmission of audio with an access request, as defined by claims. On the contrary, Lynk describes the buffering of voice data when a subscriber initiates a transmission by depressing a push-to-talk (PTT) button, followed by delayed transmission of the voice data upon receipt of a grant. At Col. 6, lines 40-48, for example, Lynk states:

PTT starts voice buffering and initiates a request for channel (103). Some time after receiving the request (104), the central controller finds an available channel, assigns it to the call, and sends a grant message (105) to the requesting unit. The delay may be longer than the time for which the subscriber speaks, as shown here. The requesting unit receives the grant (106) and begins transmission of reproduced voice from the buffer (107).

Hence, Lynk clearly does not contemplate transmission of audio with an access request, as required by Applicant's claims 1-12, 20-25, and 33, nor reception of audio with an access request, as required by claims 12-19 and 34. Similarly, Lynk makes no mention of an arbitration controller comprising a processor that receives audio with a request for access to a broadcast link, and directs transmission of the audio via the broadcast link in the event the access request is granted, as set forth in claims 26-32. Instead, Lynk stores voice data pending the outcome of an access request, and then retrieves the voice data from memory for transmission if the access request is granted.

According to Lynk, voice buffering permits a subscriber to transmit an access request and "immediately begin to speak without waiting to receive permission to access the channel." Col. 3, lines 39-42. In particular, a subscriber unit "locally records the [voice] information to be transmitted." Col. 3, lines 43-46. The subscriber unit transmits the recorded voice information only "upon being assigned a channel." Col. 3, lines 43-46. FIG. 4 of Lynk very clearly illustrates the process described by Lynk in terms of transmitting a request (103), buffering voice (102), waiting for a grant (106), and only then transmitting the buffered voice (107).

In summary, Lynk does not suggest transmission of audio with an access request, as indicated by the Examiner, but rather buffering of voice data while an access request is negotiated. This can result in undesirable latency, and is fundamentally different from the claimed invention. Consequently, the rejection under section 103 is improper and should be withdrawn.

The Stevens reference provides no additional teaching that would have suggested modification of the Lynk system to provide transmission of audio with an audio request, as claimed. In the passage cited by the Examiner (page 4, lines 1-3), Stevens describes a refusal to connect a call if a communication path to all target mobile radio units is not available.

Stevens makes no mention of the transmission of audio with an access request. Accordingly, it is unclear how Stevens could have suggested termination of such an audio transmission in the event an access request is denied. Instead, Stevens merely discusses the refusal to establish a call in the case of insufficient network resources, and provides no teaching pertinent to audio transmitted with an access request.

In view of the shortcomings identified above, Lynk and Stevens fails to establish a prima facie case of obviousness with respect to Applicant's claims. Therefore, the rejection under section 103 should be withdrawn.

In addition to the differences described above, Lynk and Stevens also fail to disclose numerous additional features set forth in Applicant's dependent claims.

For example, claims 2, 14 and 21 further specify that the audio is transmitted immediately following transmission of the access request. Lynk describes the transmission of buffered audio only after an access request is granted, however, which is contrary to the requirements of claims 2, 14 and 21.

As another example, claims 3, 15 and 22 specifically require that the audio is transmitted before receiving an acknowledgement that the access request is granted. Again, Lynk requires the grant of an access request before audio is transmitted and, in that case, the audio includes buffered audio. In the passage cited by the Examiner (Col. 5, lines 41-44), Lynk specifically states that the "buffer will hold the recorded voice until grant of the channel; then it will reproduce the voice information." This passage appears to be directly contrary to the requirements of claim 3, 15, and 22. Accordingly, it is unclear why the Examiner referred to this portion of Lynk.

Claims 4, 16, and 23 require that the audio is transmitted without receiving an acknowledgement that the access request is granted. As discussed immediately above with respect to claims 3, 15 and 22, Lynk requires the grant of an access request before transmitting the buffered voice data. In the passage cited by the Examiner (Col. 7, lines 5-8), Lynk refers to the reproduction of voice data from a buffer as further speech continues to fill the buffer. This passage appears to be wholly irrelevant to the requirements set forth in claims 4, 16, and 23.

Claims 5, 17, 24 and 30 specify that at least a portion of the audio transmission serves as the access request. For this feature, the Examiner again pointed to Col. 7, lines 5-8. However, Applicant is puzzled by the Examiner's reliance on this passage, which appears to bear no relation to the claimed limitation. Again, this passage describes the process of voice buffering, and says nothing about the use of at least a portion of an audio transmission as the access request. Of course, the Lynk reference does not even describe transmission of audio until after an access request is granted. Therefore, this reference does not contemplate that a portion of the audio transmission actually serves as the access request.

Claim 6, as a further example, requires receiving an acknowledgement that the access request is granted during transmission of the audio. In the passage cited by the Examiner (Col. 6, lines 44-54), Lynk states that the time to receive a grant may be longer than the time the subscriber speaks. It is unclear how this aspect of Lynk relates to the requirements of claim 6.

Claim 30 specifies that the processor of the arbitration controller of claim 26 interprets at least a portion of the audio transmission as the access request. Lynk makes no mention of such a feature. In the passages cited by the Examiner (Col. 6, lines 52-54 and Col. 7, lines 49, 52), Lynk describes transmission of voice to an outband frequency, and the buffering of voice data before a channel is available. These passages seem to bear no relationship to the requirements of claim 30, i.e., interpretation of at least a portion of an audio transmission as an access request.

New Claims

Applicant has added new claims 35 and 36. Claim 35 recites a method comprising transmitting a request for access to a broadcast link in a point-to-multipoint communication system from a wireless communication device, receiving audio from a user of the wireless communication device, transmitting the audio from the wireless communication device before receiving an acknowledgement that the access request is granted, and terminating the audio transmission if a denial of the access request is received. Claims 35 and 36 introduce no new matter.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 17-0026. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Respectfully submitted,

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By: 

George C. Pappas, Reg. No. 35,065
858-651-1306

QUALCOMM Incorporated
Attn: Patent Department
5775 Morehouse Drive
San Diego, California 92121-1714
Telephone: (858) 658-5787
Facsimile: (858) 658-2502